

## **REMARKS**

Claims 1-33 are pending. Claims 1, 19, 22, and 28 are amended by way of this Amendment. All claims 1-33, as amended, are believed to be allowable over the references cited by the Examiner as discussed below. Accordingly, a Notice of Allowance for the present application is respectfully requested.

### **Claim Amendments**

Independent claims 1, 19, 22, and 28 are amended to clarify that the audio signals from both first and second microphones are used to generate an error signal. It is believed that the amendments does not change the scope of the claims but rather merely clarifies that, for example, “therefrom” in claims 1 and 19 referred to the audio signals from both microphones.

### **Rejection Under 35 U.S.C. §102(b)**

Claims 1-3, 6, 10, 13-15, 19, 22, 24, 28, and 33 stand rejected under 35 U.S.C. 102(b) as being anticipated by Ruegg.

Ruegg’s hearing aid contains two microphones 11 and 12, only one of which is utilized at any given time. In particular, although the reversing switch 23 is physically coupled to both microphones 11 and 12 as shown in FIG. 2, the reversing switch 23 is nonetheless merely an automatically controlled electronic reversing switch 23 (instead of the reversing switch 22 shown in FIG. 2) that is only alternately receiving audio signals from only one and not both of the two microphones 11, 12. See col. 3, lines 16-18.

Thus, the second output 24 of the amplifier 19 is generated based on the signal from one, not both, of the microphones 11 and 12. The second output 24 controls the switch element 25 which in turn controls which output signal 13 or 14 to which the reversing switch 23 is coupled. (FIG. 2 and col. 3, lines 14-40). In other words, any “error signal” produced by the reversing switch 23 and/or the amplifier 19 is based on either the output signal 13 from the omnidirectional microphone 11 or the output signal 14 from the directional microphone 12, not both.

In contrast, each of independent claims 1, 19, 22, and 28, as amended, generally recites a system, headset, or method in which first and second microphones of an acoustic pick-up device receive acoustic signals from an acoustic source, a position estimation circuit produces an error signal from audio signals transduced by both the first and second microphones, and a controller

that uses the error signal to compensate for the acoustic pick-up device being mispositioned by providing the audio signals from the first and/or second microphones to an output.

As is evident, Ruegg fails to disclose or suggest a position estimation circuit that produces the error signal from audio signals generated by the first and second microphones.

Furthermore, the control signal generated by Ruegg estimates whether the user is in a conversation with another person or in a general background of sounds, such as being in traffic, and is *not an error signal* that estimates the device being mis-positioned. As such, the switching between the omnidirectional and directional microphones is not performed to compensate for the hearing aid being mis-positioned. Thus, Ruegg also fails to or suggest a controller that uses the error signal to compensate for the acoustic pick-up being mis-positioned by providing the audio signals from the first and/or second microphones to the output.

Withdrawal of the rejection of independent claims 1, 19, 22, and 28 as well as claims 2, 3, 6, 10, 13-15, 24, and 33 dependent variously therefrom, under 35 U.S.C. §102(b) is respectfully requested.

### **Rejection Under 35 U.S.C. §103**

Claims 1 and 7-9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Killion in view of Ruegg.

However, the combination of Killion in view of Ruegg also fails to result in the inventions as claimed for the same or similar reasons as described above. In particular, both Killion and Ruegg fails to disclose or suggest that an error signal be produced from the audio signals of both microphones.

Withdrawal of the rejection of claims 1 and 7-9 under 35 U.S.C. 103(a) as being unpatentable over Killion in view of Ruegg is respectfully requested.

Claims 1, 4, 5, 11, 12, 19-23, 25, 27, and 29-32 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen.

Again, Hagen employs a switch S1 that cannot allow the amplifier 66 (FIG. 4) to use the audio signals from both microphones to determine an error signal. In particular, when the switch S1 is open, the amplifier 66 receives audio signals from only one microphone (MIC F) , not both microphones. When the switch S2 is closed, the signals from both microphones (MIC B and F)

are summed at node 46 and because the summed signal is only one signal, an error code cannot be generated. Thus, Hagen does not disclose or suggest the inventions as claimed.

Withdrawal of the rejection of claims 1, 4, 5, 11, 12, 19-23, 25, 27, and 29-32 under 35 U.S.C. 103(a) as being unpatentable over Hagen is respectfully requested.

### **CONCLUSION**

Applicants believe that all pending claims are allowable and respectfully request a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

In the unlikely event that the transmittal letter accompanying this document is separated from this document and the Patent Office determines that an Extension of Time under 37 CFR 1.136 and/or any other relief is required, Applicant hereby petitions for any required relief including Extensions of Time and/or any other relief and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 50-2315 (Order No. 01-4962).

Respectfully submitted,



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